



**Massachusetts Bay
Transportation Authority**

MBTA Ridership Trends & Projections

Fiscal and Management Control Board

February 22, 2021

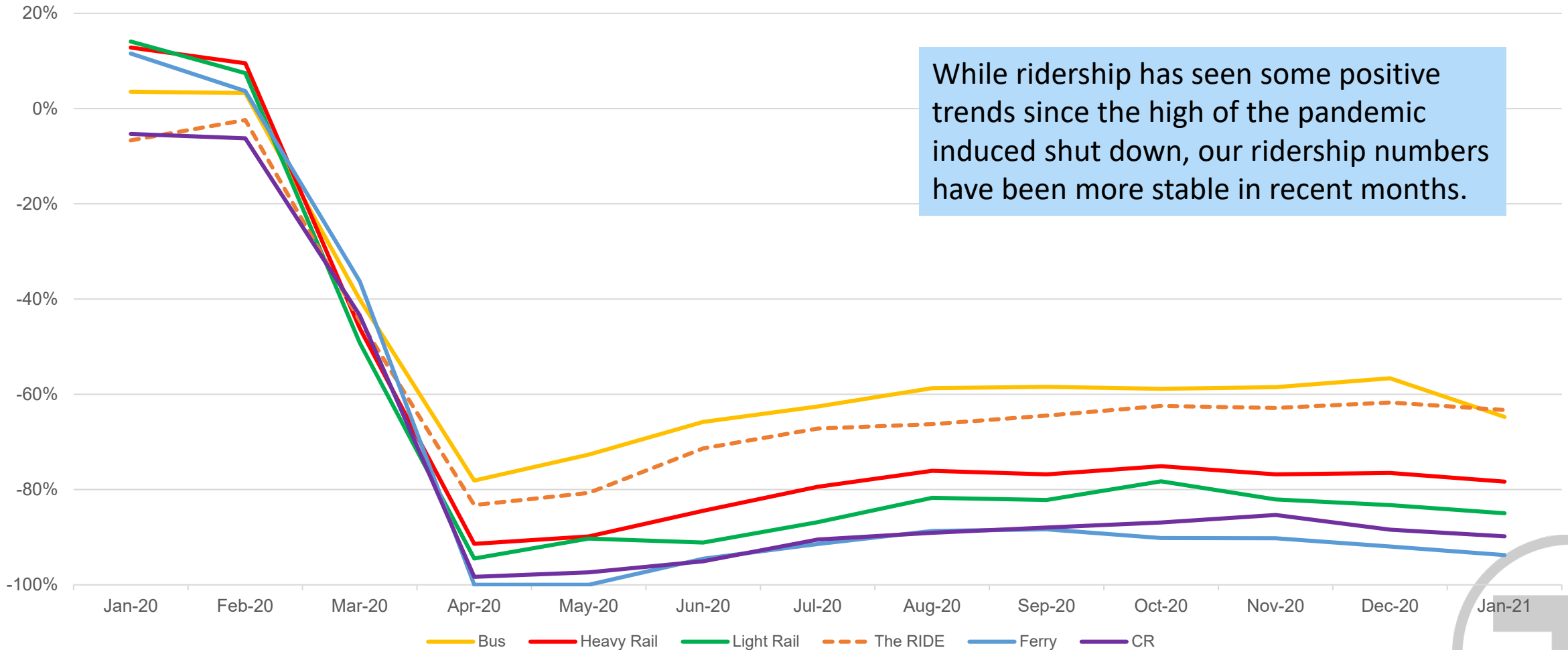
Anna Gartsman & Jen Elise Prescott

Recent Trends & Rider Profiles



Recent Ridership Trends

Avg Weekday Ridership - % Change from Same Month Year-over-Year

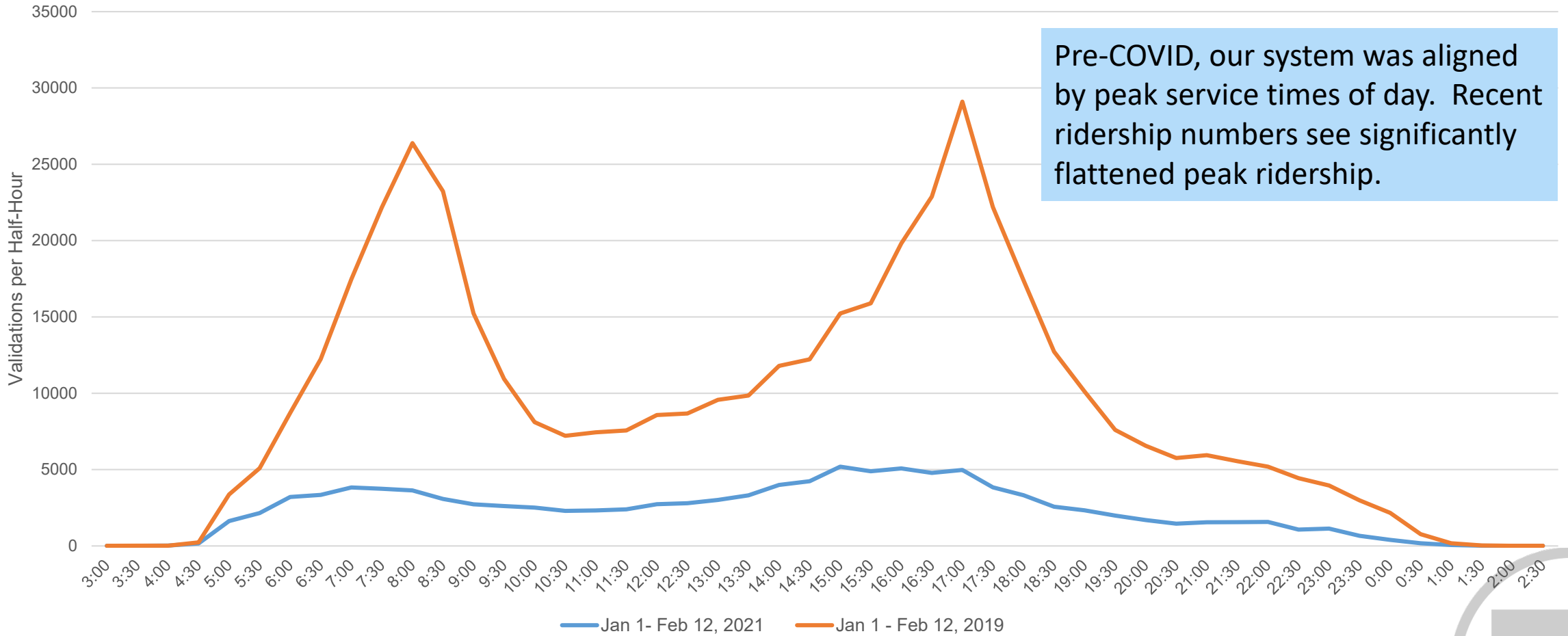


While ridership has seen some positive trends since the high of the pandemic induced shut down, our ridership numbers have been more stable in recent months.

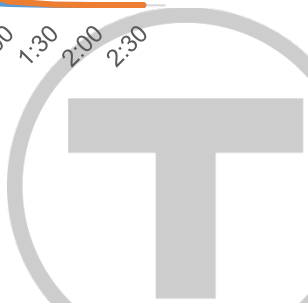


Recent Trends: Ridership by Time of Day

Validations by Half-Hour, Weekdays, Gated Stations

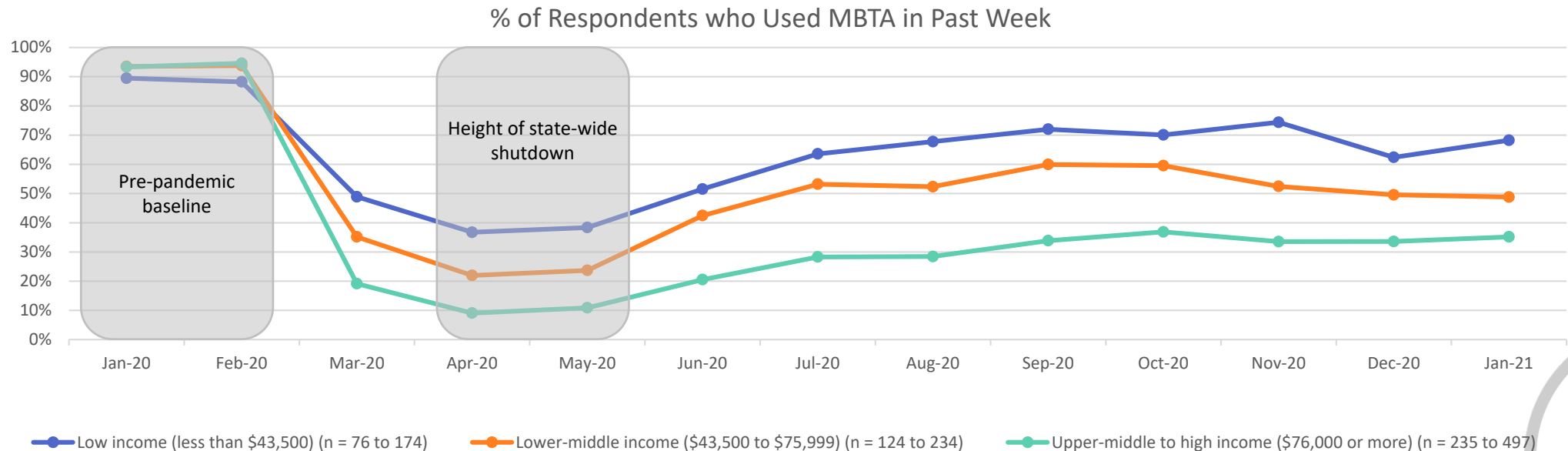


Pre-COVID, our system was aligned by peak service times of day. Recent ridership numbers see significantly flattened peak ridership.



Recent Trends: Rider Characteristics

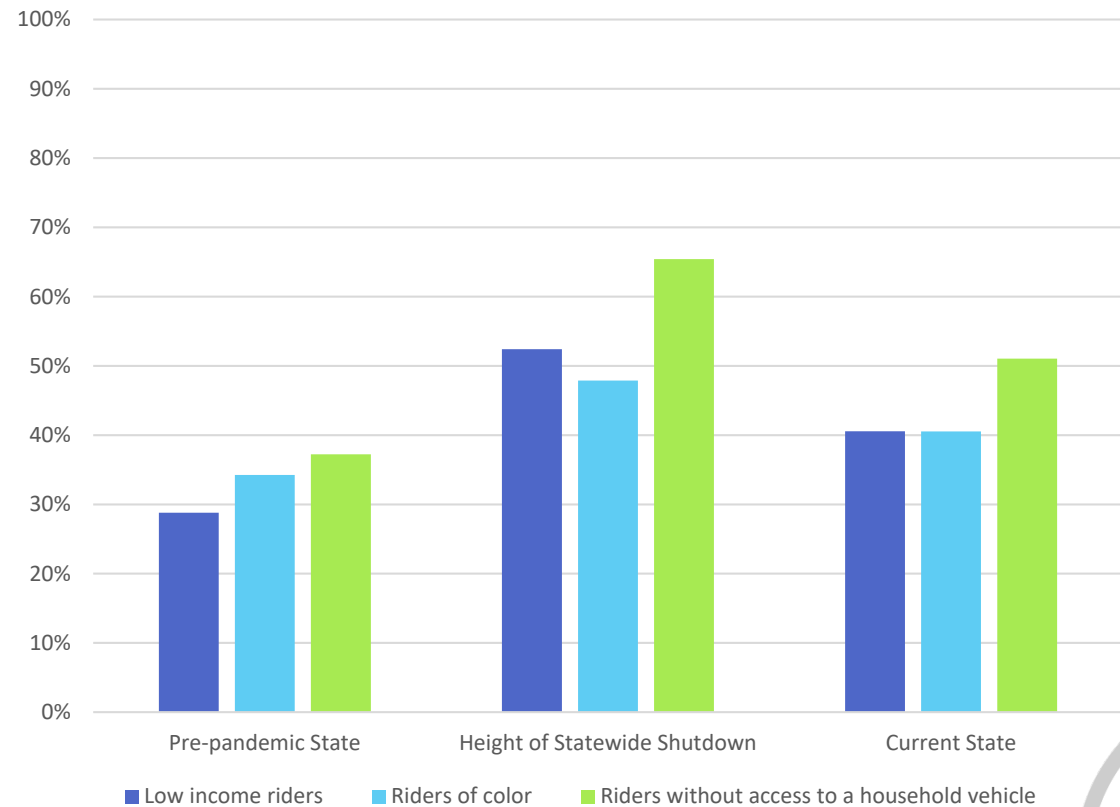
- Changes in MBTA usage during the pandemic has not been not proportional across demographic groups.
 - During April and May 2020, low-income riders were much more likely to have taken the MBTA than other riders
 - 40% of low-income riders had used the MBTA in the past week, while only 10% of riders with a household income of \$76,000 or more has done so
 - In recent months, this gap has decreased, but low-income riders remain almost two as likely to have used the MBTA
 - In January, 70% of low-income riders and 35% of riders with incomes at or above \$76,000 had used the MBTA



Recent Trends: Rider Characteristics

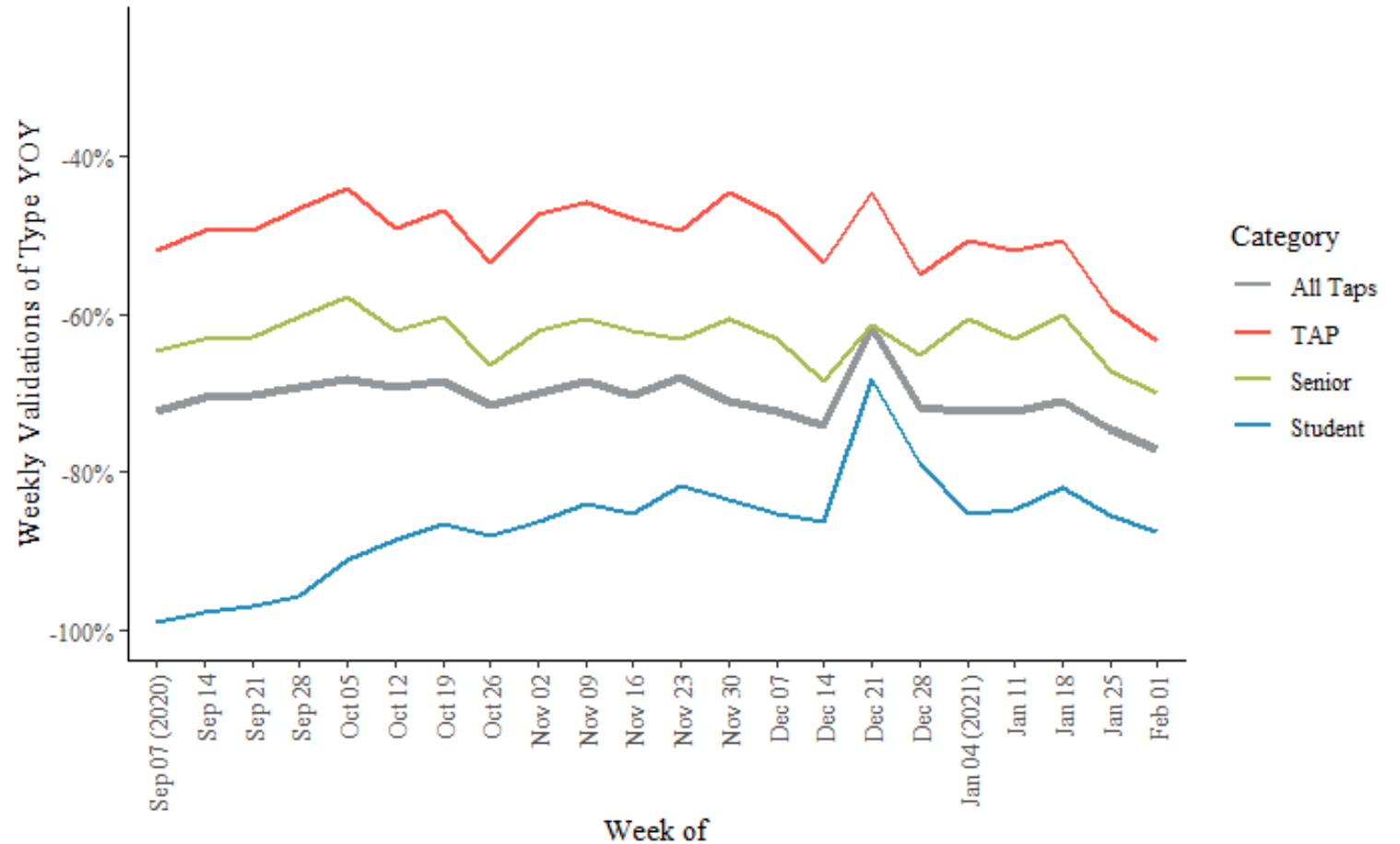
- Differences in usage between demographic groups have affected the composition of ridership over time
 - Before the pandemic, slightly under 30% of riders were low-income
 - This rose to slightly over 50% during the height of the state-wide shutdown in April and May 2020, and is currently around 40%
- The other groups of riders who have been more likely to remain on our system during the pandemic are riders of color (particularly Black riders) and riders who lack access to a household vehicle
- These trends are the strongest with regards to income and vehicle access, which are more directly related to access to alternative modes of transportation

Estimated Proportions of Demographic Groups of Riders Over Time



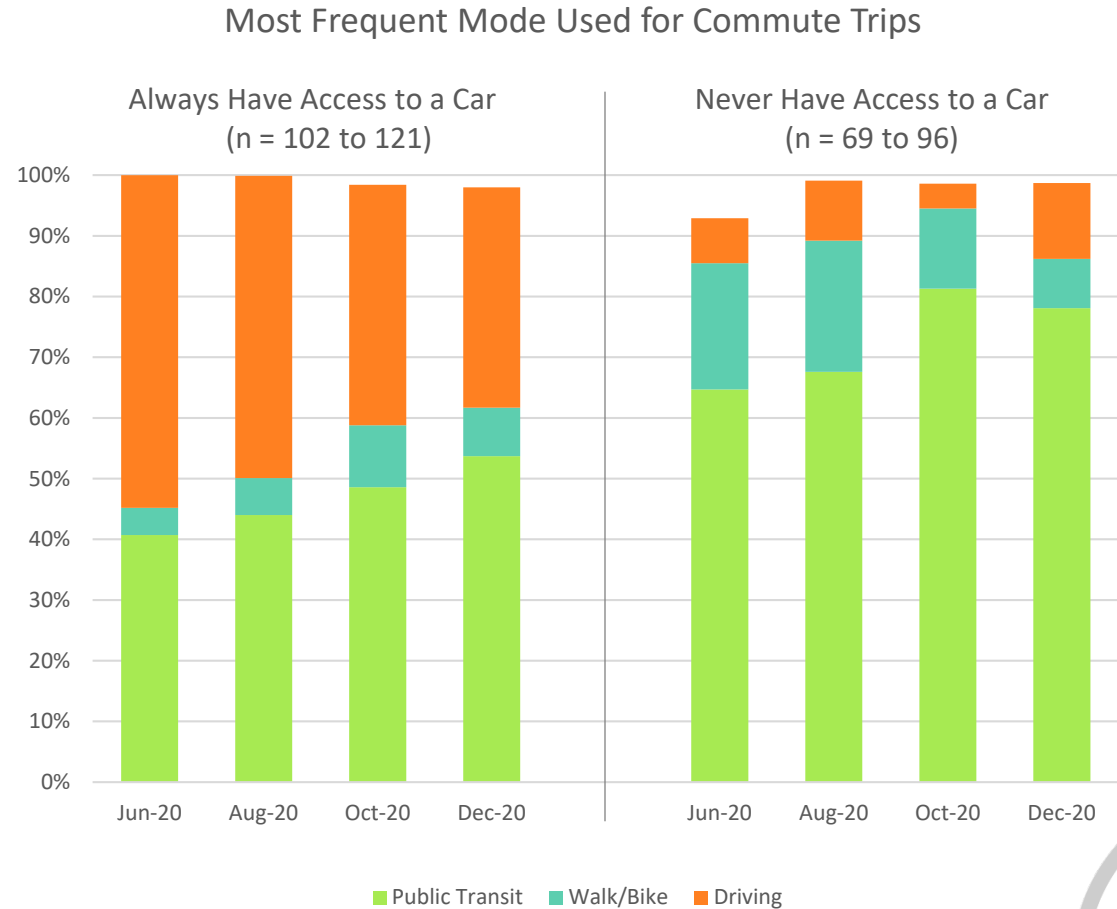
Recent Trends: Rider Characteristics

- TAP and Senior Taps riders are making up a higher percentage of riders than pre-COVID levels.
 - Validations on all CharlieCards are down about **75% across** the Bus and Rapid Transit system
 - However, validations on **Senior and TAP** cards are down **around 60%** and **50%** respectively



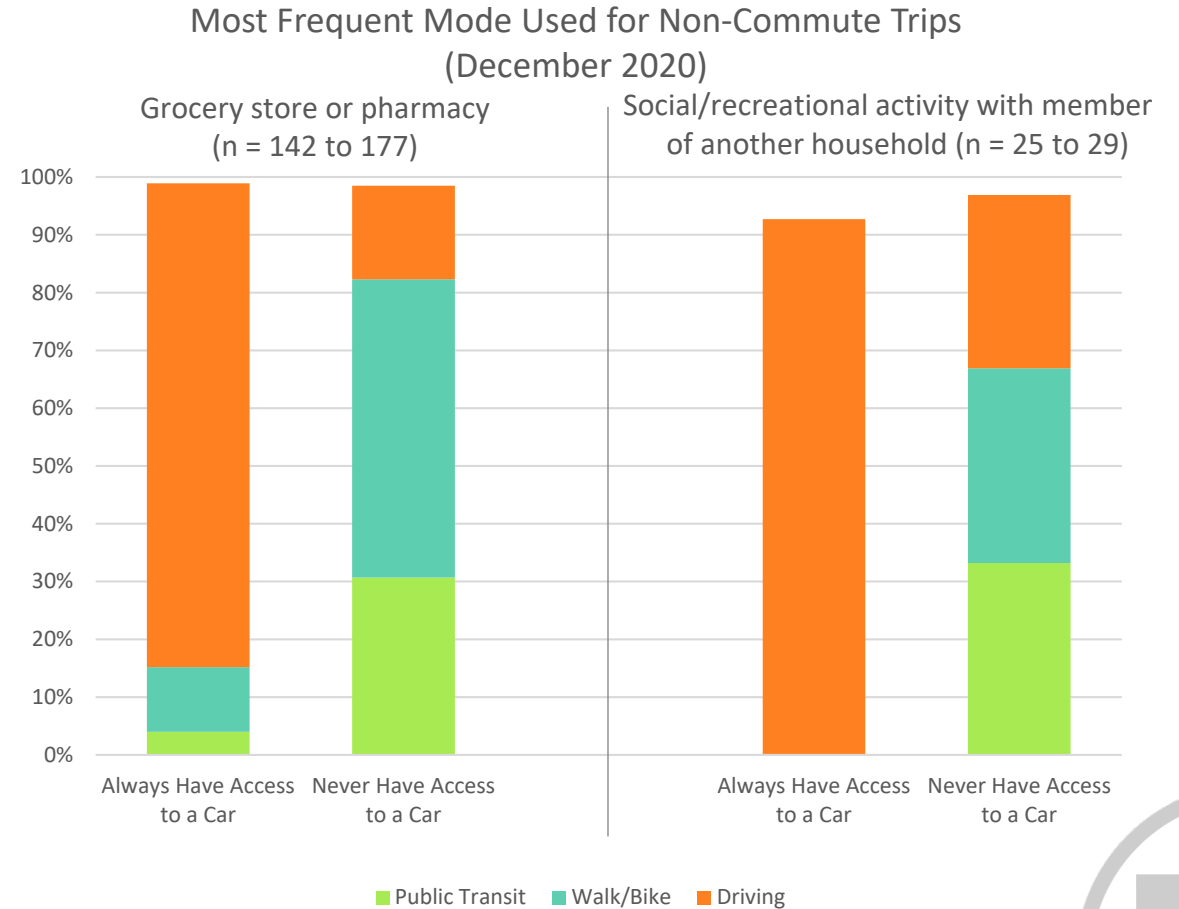
Recent Trends: Trip Characteristics

- The MBTA's mode-share for commute trips has remained relatively high, and has increased over the course of the pandemic
- Riders who have access to a household vehicle saw their MBTA mode-share for commute trips rise from about 40% to 50% from June to December 2020 due to a decrease in driving
- Riders without access to a household vehicle saw a corresponding change from about 60% to 80% due to a decrease in the use of active modes



Recent Trends: Trip Characteristics

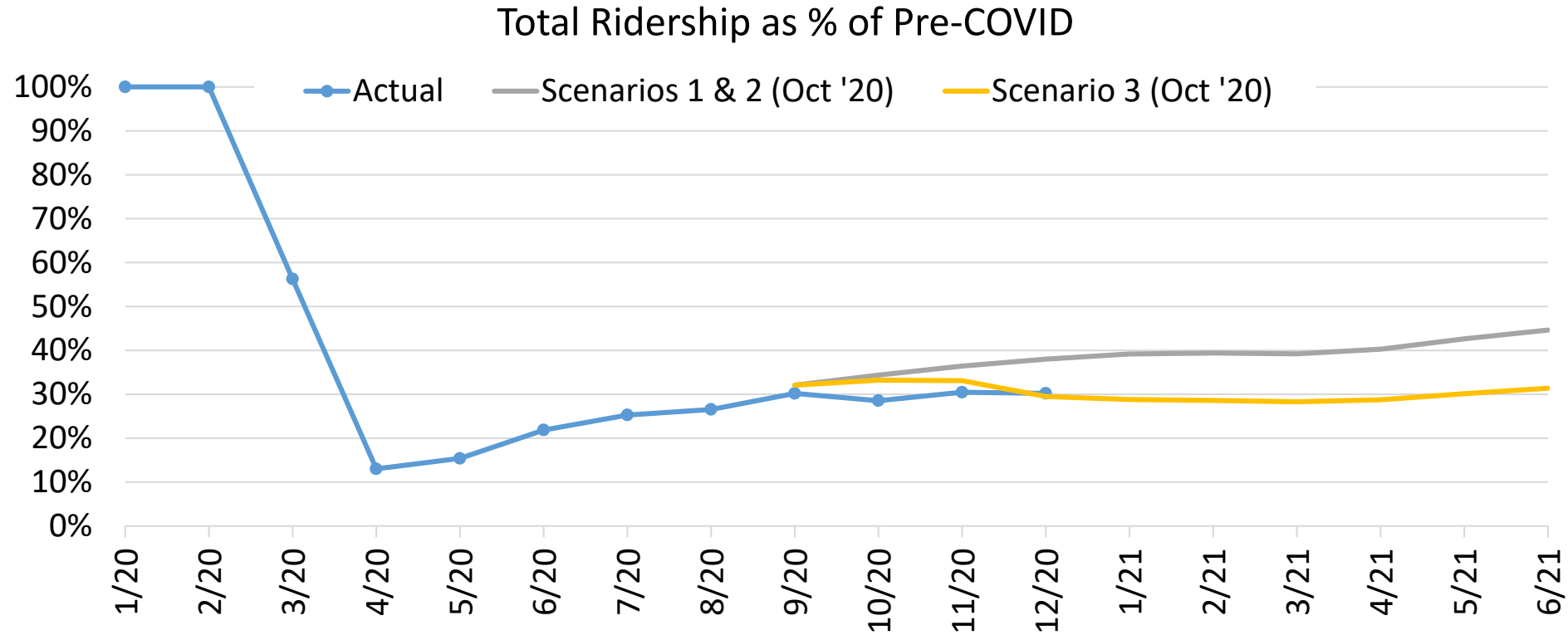
- In contrast, the MBTA's mode-share for non-commute trips, such as grocery or pharmacy trips and trips to social or recreational activities, has been relatively low and has remained stable or decreased in recent months
- The MBTA's mode-share for these types of trips has been close to zero for riders who have access to a household vehicle, and around 30% for riders who do not



Transit Ridership Projections



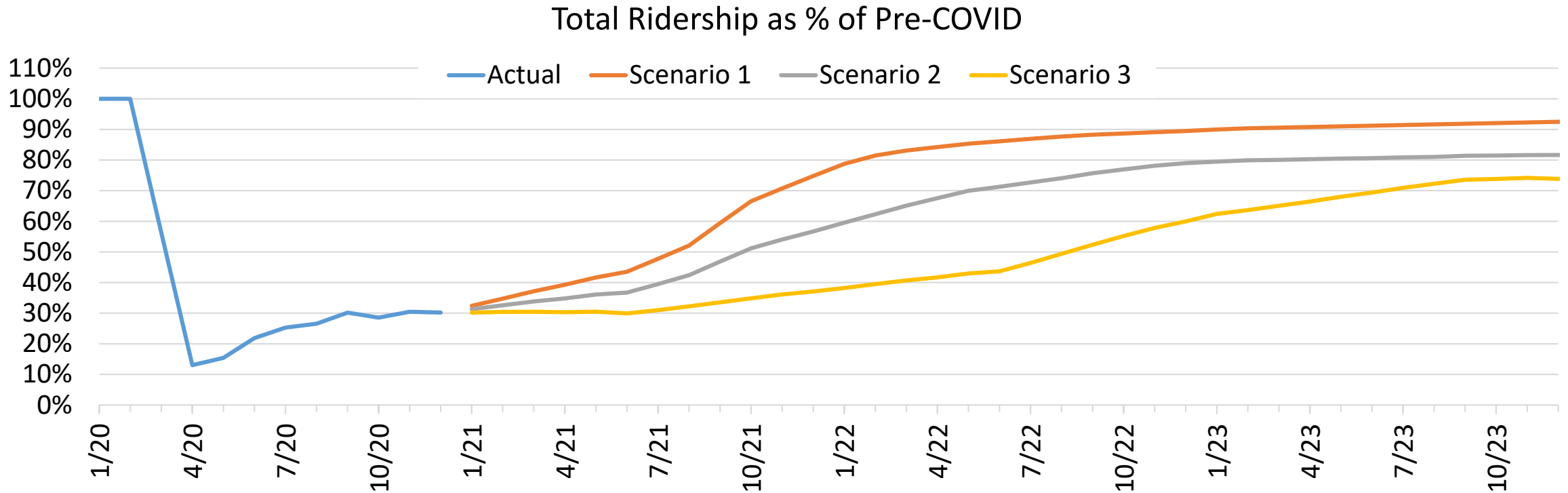
Ridership Projections: Actual vs. Oct 2020 Scenarios



- So far in FY21, ridership is tracking closely to **Scenario 3** presented in October 2020
- Today, presenting updates to all three MBTA ridership scenarios



Ridership Projections: MBTA Ridership Implications



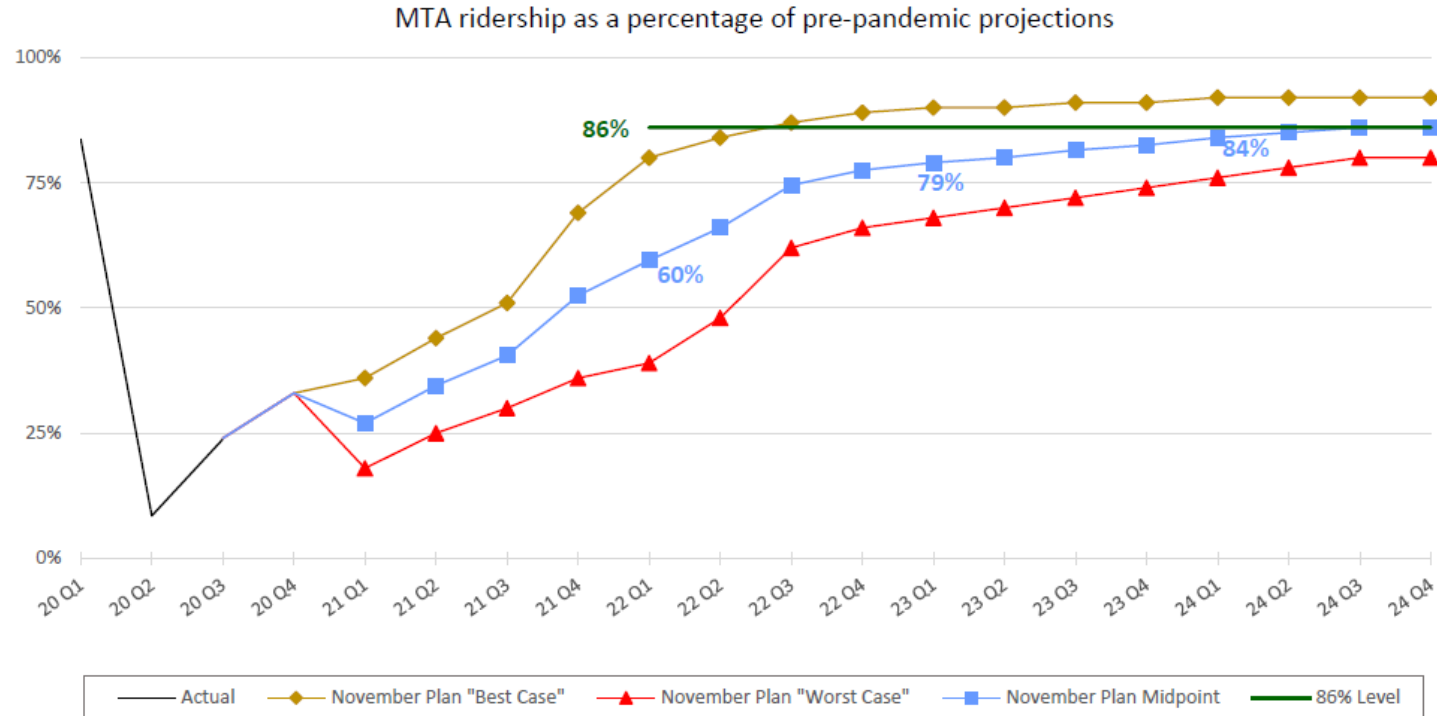
- MBTA ridership, interpreted in combination with VMT, economic, and telework assumptions, varies between scenarios in the “New Normal”
- The transitional phase varies more between scenarios, capturing more uncertainty about how overall tripmaking will translate to transit travel and MBTA ridership
- Scenarios 1 and 2 see a “boost” in ridership in Fall 2021; while Scenario 3 sees a longer span of growth

Projections Track other Transit Agencies

- McKinsey presented a February Financial Plan for MTA on February 18, 2021
- Midpoint of their three projections leads to a 86% of pre-COVID ridership by the end of 2024



McKinsey projected the “new normal” ridership level between 80% and 92% of pre-pandemic levels by the end of 2024 (86% midpoint)



National Return in Travel Patterns

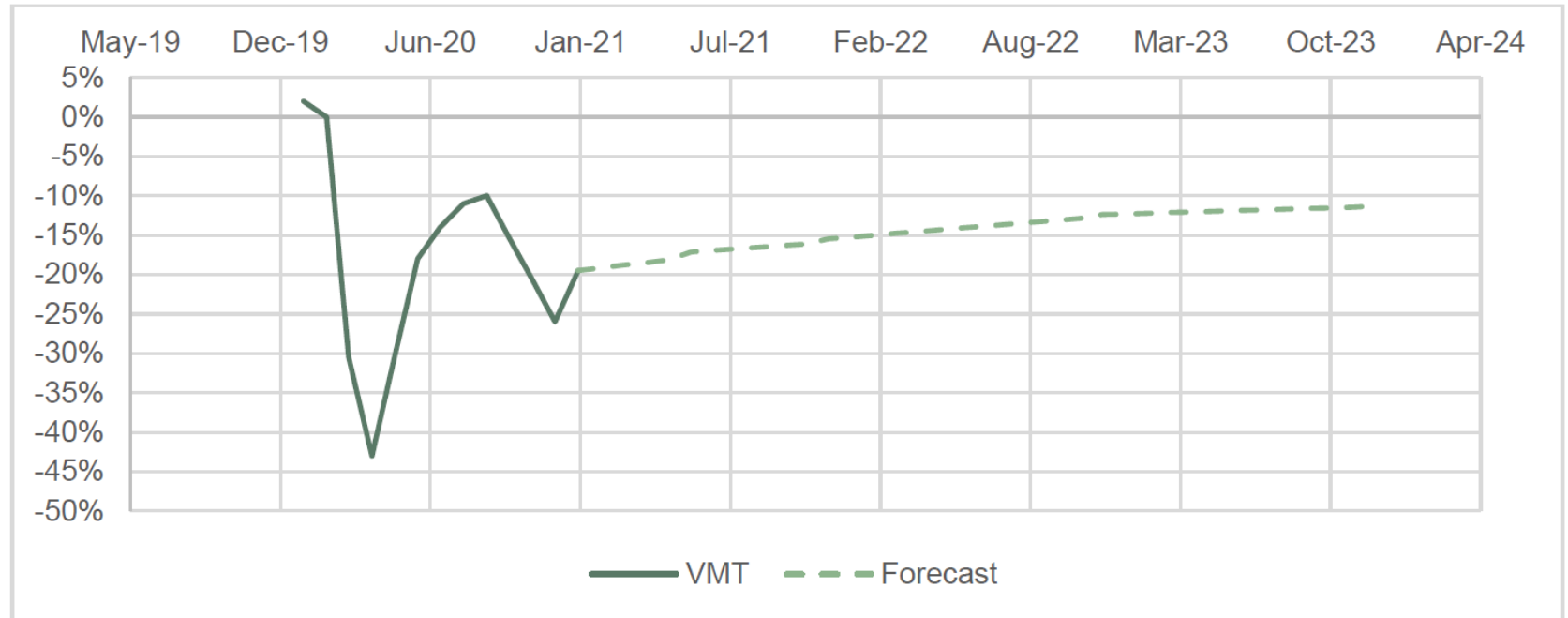


APTA report, prepared by EBP US, Inc. projects a similar return to trips:

- Vehicle Miles of Travel (VMT) is one of measure of overall tripmaking, of which transit is one mode.
- APTA is predicting 85-90% pre-COVID VMT by end of CY 2023.

The Impact of the COVID-19 Pandemic on Public Transit Funding Needs in the U.S., from January 27, 2021

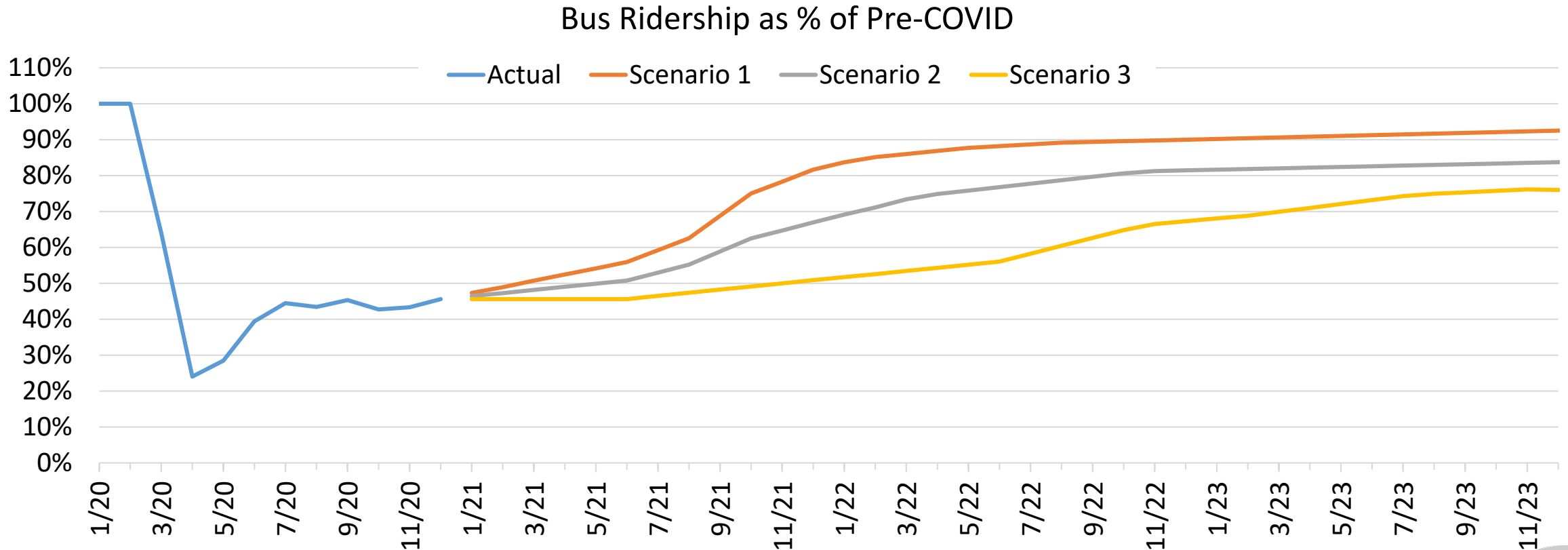
Figure 4 VMT Loss and Forecast



Sources: StreetLight VMT Monitor and U.S. Department of Transportation, Federal Highway Administration, Traffic Volumes and Trends http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm. Forecasts based on Congressional Budget Office employment forecast.

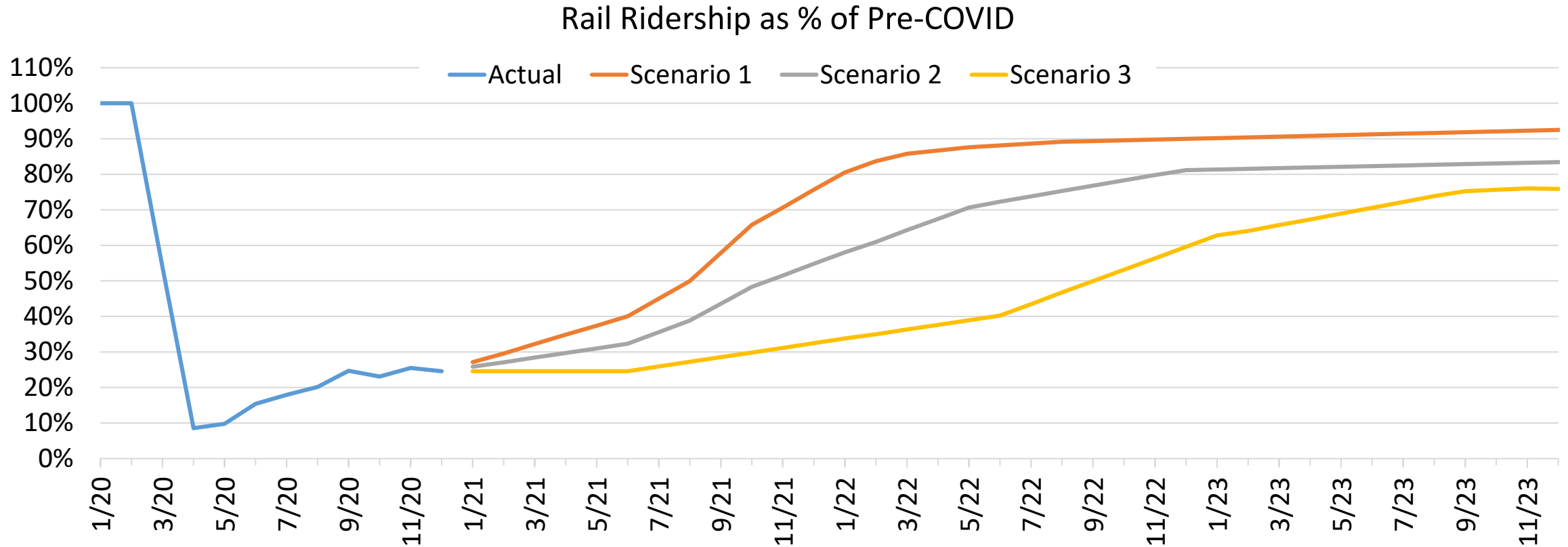


Ridership Projections: MBTA Ridership Implications (Bus)



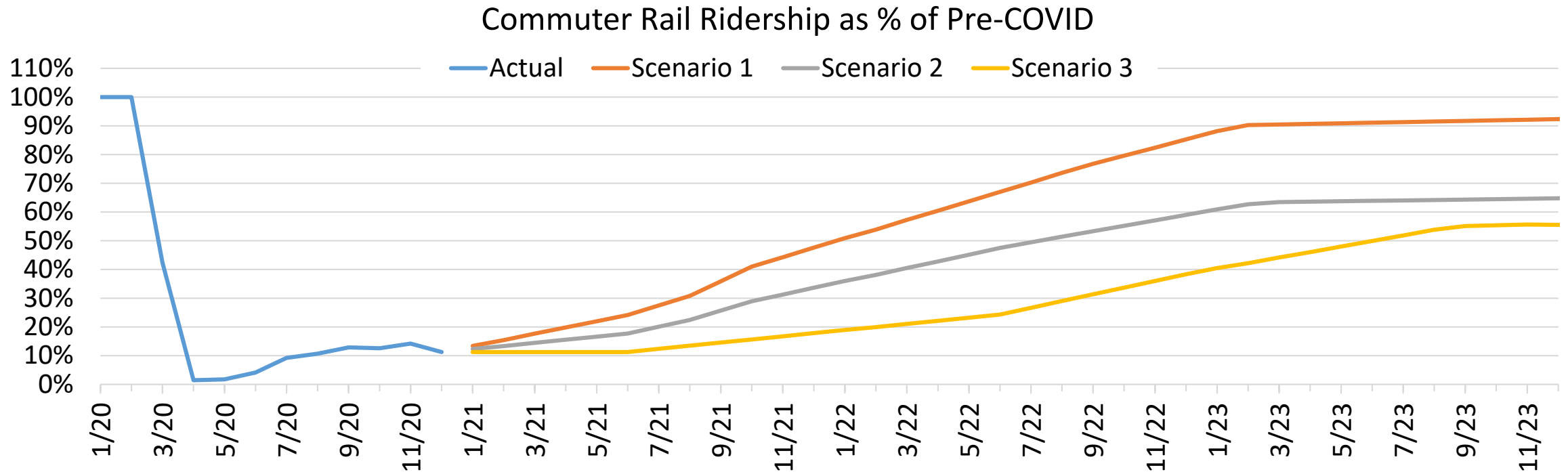
- Bus ridership is projected to recover to between 75%-100% of pre-COVID in the “New Normal”
- Both bus and rapid transit ridership see the boost in Fall 2021 in Scenarios 1 and 2 from returning students and teleworkers

Ridership Projections: MBTA Ridership Implications (Rapid Transit)



- Rapid transit ridership is also projected to recover to between 75%-100% of pre-COVID in the “New Normal”
- Both bus and rapid transit ridership see the boost in Fall 2021 in Scenarios 1 and 2 from returning students and teleworkers

Ridership Projections: MBTA Ridership Implications (Commuter Rail)



- Commuter Rail ridership projections are substantially different: it is expected to recover to between 55%-100% of pre-COVID in the “New Normal”
- Where bus and rapid transit are expected to compensate for decreases in commute trips with other types of trips, Commuter Rail primarily services commute trips and is not expected to “make up” for those trips as much in scenarios with extensive telework (Scenarios 2 and 3)

Ridership Projections: Planning Implications

- MBTA staff are using these updated scenarios, as one relevant input, to assist with planning exercises for both service and budget in the near term for FY 22.
- Continue to conduct ongoing research, and look at additional sources of information to assist in planning and projecting ridership.
- The most optimistic Scenario (1) assumes 90% of pre-COVID ridership at the end of CY 22, with the return of ridership being quickest on bus and rapid transit, and slowest on Commuter Rail.
- As ridership returns to the system, MBTA budget team is building in flexibility to fund additional service.

